CLAIMS

We Claim:

1. A method for graphically presenting multiple signals, comprising the following step:

(a) separately representing on a display a signal for each measured frequency channel, including the following substep:

(a.1) superimposing representations of the signals, including the following substeps:

(a.1.1) aligning center channel frequencies for all the representations of the signals relative to a single position on a first axis, and

(a.1.2) indicating, for all the representations of the signals, amplitude relative to a second axis.

2. A method as in claim 1 additionally comprising the following step:

(b) displaying a line, intersecting the single position on the first axis, that indicates the center channel frequency for all the representations of the signals.

3. A method as in claim 1 additionally comprising the following step:

(b) displaying a mask that indicates when values for the signals are outside channel frequency limits and that indicates when values for the signals are outside channel amplitude limits.

4. A method as in claim 1 additionally comprising the following steps:

(b) displaying a mask that indicates when values for the signals are outside channel frequency limits and that indicates when values for the signals are outside channel amplitude limits; and,

(c) using margin from the mask as a tool to measure the quality of signals.

5. A method as in claim 1 additionally comprising the following steps:

(b) displaying a mask that indicates when values for the signals are outside channel frequency limits and that indicates when values for the signals are outside channel amplitude limits; and,

(c) counting mask hits as a tool to measure the quality of signals.

6. A method as in claim 1 wherein substep (a.1) additionally includes the following substep:

(a.1.3) using pixel color to indicate how many representations of the signals overlap each pixel.

7. A method as in claim 1 wherein substep (a.1) additionally includes the following substep:

(a.1.3) using shades of gray to indicate how many representations of the signals overlap each pixel.

8. A method as in claim 1 wherein substep (a.1) additionally includes the following substep:

(a.1.3) using shades of color to indicate how many representations of the signals overlap each pixel.

9. An instrument that measures multiple signals, comprising:

a display; and,

an analyzer that separately represents on the display a signal for each measured frequency channel, wherein representations of the signals are superimposed so that center channel frequencies for all the representations of the signals are aligned relative to a single position on a first axis, and so that for all the representations of the signals, amplitude is indicated relative to a second axis.

10. An instrument as in claim 9 wherein the analyzer additionally represents on the display a line intersecting the single position on the first axis, the line indicating the center channel frequency for all the representations of the signals.

11. An instrument as in claim 9 wherein the analyzer additionally represents on the display a mask that indicates when values for the signals are outside channel frequency limits and that indicates when values for the signals are outside channel amplitude limits.

12. An instrument as in claim 9 wherein the analyzer additionally represents on the display a mask that indicates when values for the signals are outside channel frequency limits and that indicates when values for the

signals are outside channel amplitude limits, margins from the mask being used as a tool to measure the quality of signals.

13. An instrument as in claim 9 wherein the analyzer additionally represents on the display a mask that indicates when values for the signals are outside channel frequency limits and that indicates when values for the signals are outside channel amplitude limits, mask hits being counted as a tool to measure the quality of signals.

14. An instrument as in claim 9 wherein pixel color on the display indicates how many representations of the signals overlap each pixel.

15. An instrument as in claim 9 wherein shades of gray of pixels on the display indicate how many representations of the signals overlap each pixel.

16. An instrument as in claim 9 wherein shades of color to indicate how many representations of the signals overlap each pixel.

17. A method for measuring multiple signals, comprising the following steps:

(a) representing on a display a signal for each measured frequency channel; and,

(b) displaying masks that indicate when values for the signals are outside channel frequency limits;

18. A method as in claim 17 wherein in step (b) the displayed masks also indicate when values for the signals are outside channel amplitude limits.

19. A method as in claim 17 additionally comprising the following step:

(c) using margin from the mask as a tool to measure the quality of signals.

20. A method as in claim 17 additionally comprising the following step:

(c) counting mask hits as a tool to measure the quality of signals.